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CHARLESTON, TN 37310-0248

VIA: E-MAIL AND U.S. MAIL

August 8, 2006

Roger W. Briggs
Executive Officer
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401

RE: Olin Corporation Site, 425 Tennant Avenue, Morgan Hill, CA
Response to Central Coast Water Board July 19, 2006 Letter
Bottled Water Termination Phases One Through Five and
August 2, 2006 NOV

Dear Mr. Briggs:

Olin Corporation (Olin) has submitted five phases of analytical results pursuant to Central Coast, Regional Water Quality Control Board (Water Board) Cleanup or Abatement Order No. R3-2004-0101, as modified by State Water Resources Control Board (State Board) Order No. WQ 2005-0007 (State Board Order). These submittals document that the State Board Order criteria for termination of bottled water have been met under the referenced order. The Water Board reviewed Olin's submittals and associated quality control/quality assurance (QA/QC) data for the 459 wells presented in the five phases of submittals and, with the exception of 40 wells, the Water Board concurred in their letter of July 19, 2006 that Olin met the State Board criteria for termination of bottled water for 419 of the 459 wells. The Water Board rejected the analytical results for 40 wells based on what the Water Board explained were a lack of "valid QA/QC" results for these wells. In addition, on August 2, 2006 Water Board issued a notice of violation directing Olin to resume supplying bottled water to, and sampling of, the subject 40 wells.

By this letter, Olin formally responds to the Water Board's July 19 letter and August 2 NOV, submitting the basis for Olin's compliance with the subject Water Board and State Board replacement water order. Olin also submits additional current sampling results for the subject 40 wells further supporting Olin's compliance, requesting the Water Board to reconsider its prior determination and requesting a meeting to discuss and attempt to informally resolve this dispute.

Water Board Review of Well Analytical Results

Since 1st Quarter 2003, analytical data for the wells in question have been provided to the Water Board in Olin's quarterly monitoring reports. From June 15 through July 18, 2006, Olin provided the Water Board with final analytical results of 459 wells that met the State Board criteria for termination of bottled water. Water Board staff reviewed the analytical and quality control data

associated with the phase one through phase five submittals. Although the Water Board concurred that the analytical data for 419 of the 459 wells met the State Board criteria of perchlorate concentrations less than or equal to 6.0 ug/L for four prospective quarters, the Regional Board identified 40 wells that had perchlorate results with matrix spike recoveries less than the recovery limit of 80 to 120 percent as specified in EPA Method 314.0 in at least one of the last four consecutive quarters. Based on this finding, the Water Board deemed the data unacceptable for use in assessing the 40 wells pursuant to the Order. The subject analytical results are shown with gray shading in Table 1. Table 1 also includes the historical results for the 40 wells and recent results from sampling conducted in July 2006.

Olin's Response to Water Board Review and Findings

As part of Olin's data validation process, laboratory results are reviewed based on method QA/QC goals contained in USEPA Method 314.0 and general procedures in validation guidance provided by the USEPA for inorganics per the "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review"; Office of Superfund Remediation and Technology Innovation; EPA-540-R-04-004; October 2004. Validated data fall within three categories:

- Acceptable without qualification (indicated with an A flag for the well samples)
- Usable with qualification (indicated with UJ or J flags and possible bias notes - or +)
- Rejected or unusable (R flag) for gross QC issues

The laboratory quality control procedures for USEPA Method 314.0 include the performance of a matrix spike (MS) and a matrix spike duplicate (MSD) on each sample group that are analyzed. The MS is an actual groundwater sample that has been fortified, or spiked, in the laboratory with a known quantity of perchlorate and analyzed exactly like an environmental sample. The MSD is a second matrix spike sample prepared and analyzed in the same fashion as a check on the results of the spiked sample analysis. The purpose of the spiked sample analyses is to determine whether the sample matrix contributes bias, such as interferences, to the analytical results of the environmental sample. Recovery is expressed in percent perchlorate in the spiked sample divided by the amount spiked into the sample prior to the analysis, times 100. If the recovery for perchlorate falls outside the 80 to 120 percent range specified in EPA Method 314.0, the result for perchlorate in the unfortified sample should be flagged to inform the data user that the result might be biased due to matrix effects.

As mentioned above, Method 314.0 sets matrix spike recovery goals of 80 to 120 percent and indicates that samples outside limits should be labeled (qualified). For the wells identified by the Water Board, groundwater samples in third quarter or fourth quarter 2005 were qualified due to matrix spike (laboratory-fortified matrix) recoveries outside limits. However, it is important to note that *a groundwater sample that has matrix spike recoveries outside the recovery limits is not a method requirement in USEPA Method 314*. For each of the groundwater samples that had MS and MSD recoveries outside the recovery limits, a laboratory control sample (laboratory fortified blank) was analyzed and the results were within specified recovery limits. The preparation and analysis of the laboratory control sample is a requirement of the method and indicates that the laboratory procedures and instrumentation are acceptable with the guideline of USEPA Method 314.0.

For the Water Board list of wells, the majority of matrix spike sample recoveries analyzed during all four quarters in 2005 and 2006 were with method limits indicating that there was not an overall problem with recovery of perchlorate in the sample matrix. As previously, mentioned, *a*

subset of spike samples fell outside limits and were qualified estimated. No gross issues related to recovery of perchlorate were identified during validation and that all results are interpreted to be usable based on USEPA data validation guidelines.

During the evaluation of each domestic well data set considered for bottled water termination, laboratory analytical results from each of the four quarters were reviewed. Data qualifiers were reviewed to evaluate if uncertainties regarding data qualification had a significant impact on the determination of the concentration of perchlorate. Based on the evaluation of the entire data set and consistent with the USEPA Method 314.0 and USEPA guidelines referenced above, J qualified data can be used in combination with other unqualified results for each of the well data sets. The qualification of data as estimated was not interpreted to be significant if estimated concentrations were consistent with concentrations reported with other rounds that were reported as acceptable without qualification. In all cases, estimated results were consistent with other rounds and the estimated data along with the other rounds of unqualified data were interpreted to be adequate to characterize the concentration of perchlorate at the well location.

Despite our disagreements regarding the validity of the analytical data, Olin proactively expedited sampling of the 40 wells at issue during the week July 17, 2006, shown in Table 1 (bold font). Laboratory quality control results have been reviewed for 39 of the 40 preliminary sample results and all data are within recovery limits for MS and MSD spike recoveries, and laboratory fortified blank recoveries. Assuming that the data is acceptable following complete data validation, the preliminary data indicates that 35 wells remained less than 6 ppb. Twenty-one of these wells now have 4 consecutive, validation and unqualified, analytical results less than 6 ppb and, pursuant to the State Board Order, should not be eligible for reinstatement of bottled water. For the remaining 16 wells without 4 consecutive quarters of data, we will temporaily reinstate bottled water and continue sampling. Based on this new information however, we respectfully request that the Water Board reconsider its prior July 19 determination and August 2 NOV and request a meeting to discuss and informally resolve same.

Five of the 40 results indicated a concentration of perchlorate greater than 6 ppb (Table 1). The users associated with these 5 wells exceeding the PHG had bottled water temporarily reinstated on August 4, 2006. For these five wells, Olin has collected a confirmation sample from each well on August 1, 2006 per DHS guidelines for monitoring of chemicals with notification levels. DHS recommends, a confirmation sample as soon as possible, with the average value compared to the notification level (see http://www.dhs.ca.gov/ps/ddwem/chemicals/AL/notificationoverview.pdf). In the future, DHS protocol for confirmation sampling will be used to assess reinstatement of bottle water.

We look forward to the Water Board's response to Olin's requests and continuing to address any Water Board concerns.

Sincerely,
OLIN CORPORATION

[Original Signed By]

Curt M. Richards
Vice President
Environment, Health and Safety

/attachment

/ec: Eric Gobler – Water Board (electronic copy)
Hector Hernandez – Water Board (electronic copy)
Rick McClure – Olin Corporation (electronic copy)
Dave Share – Olin Corporation (electronic copy)
Don Smallbeck – MACTEC (electronic copy)

TABLE 1

Olin/Morgan Hill
Wells Questioned By the Water Board

Analytical Results

Well Name	Sample Date	Result in ug/L	Lab Qualifier	Validation Qualifier
10S03E01P003	7/19/2005	5.4		J-
10S03E01P003	10/5/2005	5.1		A
10S03E01P003	1/17/2006	4.6		A
10S03E01P003	5/25/2006	5.8		A
10S03E01P003	**7/17/2006**	**3.9**	**J**	**A**
10S03E12A013	8/15/2005	3.9	J	J-
10S03E12A013	10/6/2005	4.4		A
10S03E12A013	1/11/2006	3	J	A
10S03E12A013	5/25/2006	5.5		A
10S03E12A013	**7/17/2006**	**4.5**		**A**
10S04E07D010	8/16/2005	4.3		J-
10S04E07D010	10/10/2005	4.1		A
10S04E07D010	1/10/2006	5.2		A
10S04E07D010	5/23/2006	5.5		A
10S04E07D010	**7/17/2006**	**5.5**		**A**
10S04E07E001	5/20/2005	6.5		A
10S04E07E001	8/16/2005	4.8		J-
10S04E07E001	10/11/2005	2.4	J	A
10S04E07E001	1/16/2006	4.4		A
10S04E07E001	5/23/2006	4.4		A
10S04E07E001	**7/17/2006**	**5.3**		**A**
10S04E07E005	5/18/2005	6		A
10S04E07E005	7/20/2005	4.8		J-
10S04E07E005	10/11/2005	5.1		A
10S04E07E005	1/17/2006	5.4		A
10S04E07E005	5/23/2006	5.2		A
10S04E07E005	**7/17/2006**	**5.2**		**A**
10S04E07E016	7/20/2005	5.4		J-
10S04E07E016	10/11/2005	5.7		A
10S04E07E016	1/17/2006	5.3		A
10S04E07E016	5/23/2006	4.1		A
10S04E07E016	**7/17/2006**	**4.1**		**A**
10S04E07E018	7/20/2005	4.5		J-
10S04E07E018	10/11/2005	5		A
10S04E07E018	1/17/2006	3.5	J	A
10S04E07E018	5/23/2006	3.2	J	A
10S04E07E018	**7/17/2006**	**4**		**A**
10S04E07E023	7/20/2005	3.8	J	J-
10S04E07E023	10/10/2005	4.6		A

TABLE 1

Olin/Morgan Hill
Wells Questioned By the Water Board

Analytical Results

Well Name	Sample Date	Result in ug/L	Lab Qualifier	Validation Qualifier
10S04E07E023	1/10/2006	4.9		A
10S04E07E023	5/23/2006	4.2		A
10S04E07E023	**7/17/2006**	**3.5**	**J**	**A**
10S04E07E029	8/17/2005	3.4	J	A
10S04E07E029	10/11/2005	4.3		A
10S04E07E029	1/16/2006	5.2		A
10S04E07E029	5/23/2006	4		A
10S04E07E029	**7/18/2006**	**4.6**		**A**
10S04E07E034	5/23/2005	5.8		A
10S04E07E034	6/29/2005	6.3		A
10S04E07E034	7/25/2005	5.6		J-
10S04E07E034	10/11/2005	5.2		A
10S04E07E034	1/17/2006	5.1		A
10S04E07E034	5/23/2006	5.3		A
10S04E07E034	**7/17/2006**	**5.6**		**A**
10S04E07M020	7/20/2005	5.1		J-
10S04E07M020	10/10/2005	5.2		A
10S04E07M020	1/17/2006	4.9		J-
10S04E07M020	1/17/2006	4.4		J-
10S04E07M020	5/23/2006	4.7		A
10S04E07M020	**7/17/2006**	**5.3**		**A**
10S04E07N017	8/17/2005	3.2	J	A
10S04E07N017	10/18/2005	4.4		A
10S04E07N017	1/25/2006	4		A
10S04E07N017	5/25/2006	5.2		A
10S04E07N017	**7/18/2006**	**5.1**		**A**
10S04E07N024	8/17/2005	4.5		J-
10S04E07N024	10/12/2005	5.4		A
10S04E07N024	1/16/2006	5.2		A
10S04E07N024	6/1/2006	5.6		A
10S04E07N024	**7/18/2006**	**4.9**		**A**
10S04E17N007	8/8/2005	3.9	J	A
10S04E17N007	10/11/2005	3.3	J	J-
10S04E17N007	1/24/2006	3.5	J	A
10S04E17N007	5/22/2006	4.7		A
10S04E17N007	**7/17/2006**	**3.8**	**J**	**A**

TABLE 1

Olin/Morgan Hill
Wells Questioned By the Water Board

Analytical Results

Well Name	Sample Date	Result in ug/L	Lab Qualifier	Validation Qualifier
10S04E18B009	8/2/2005	4.6		J-
10S04E18B009	10/13/2005	5		A
10S04E18B009	1/25/2006	5.2		A
10S04E18B009	5/24/2006	5.1		A
10S04E18B009	**7/18/2006**	**6.3**		**A**
10S04E18G007	8/2/2005	4.6		J-
10S04E18G007	10/11/2005	4.4		A
10S04E18G007	1/25/2006	5.9		A
10S04E18G007	2/23/2006	6		A
10S04E18G007	5/23/2006	4.6		A
10S04E18G007	**7/17/2006**	**4.5**		**A**
10S04E18H011	6/29/2005	6.1		A
10S04E18H011	8/16/2005	4.5		J-
10S04E18H011	10/10/2005	4.9		A
10S04E18H011	1/25/2006	5.1		A
10S04E18H011	5/24/2006	3.7	J	A
10S04E18H011	**7/17/2006**	**6.7**		**A**
10S04E18H016	8/1/2005	2.9	J	J-
10S04E18H016	10/10/2005	3.9	J	A
10S04E18H016	1/25/2006	4.6		A
10S04E18H016	5/31/2006	4.2		A
10S04E18H016	**7/17/2006**	**5.1**		**A**
10S04E18J001	8/1/2005	4.8		J-
10S04E18J001	10/11/2005	4.6		A
10S04E18J001	1/25/2006	6		A
10S04E18J001	5/23/2006	5.8		A
10S04E18J001	**7/17/2006**	**5**		**A**
10S04E18J005	8/9/2005	5.2		J-
10S04E18J005	10/11/2005	4.8		A
10S04E18J005	1/25/2006	5.7		A
10S04E18J005	5/24/2006	4.9		A
10S04E18J005	**7/18/2006**	**7.2**		**A**
10S04E18K002	8/1/2005	3.4	J	J-
10S04E18K002	10/12/2005	-4		UJ
10S04E18K002	1/25/2006	3.1	J	A
10S04E18K002	5/22/2006	3.8	J	A
10S04E18K002	**7/17/2006**	**3.4**	**J**	**A**

TABLE 1

Olin/Morgan Hill
Wells Questioned By the Water Board

Analytical Results

Well Name	Sample Date	Result in ug/L	Lab Qualifier	Validation Qualifier
10S04E18L004	8/1/2005	3.9	J	J-
10S04E18L004	10/12/2005	-4		UJ
10S04E18L004	1/25/2006	4.1		A
10S04E18L004	5/24/2006	4.2		A
10S04E18L004	**7/17/2006**	**4.7**		**A**
10S04E18Q001	7/20/2005	4		A
10S04E18Q001	10/11/2005	4.1		J-
10S04E18Q001	1/19/2006	4.7		A
10S04E18Q001	5/31/2006	3.9	J	A
10S04E18Q001	**7/17/2006**	**3.8**	**J**	**A**
10S04E18Q007	7/20/2005	3.7	J	A
10S04E18Q007	10/11/2005	2.8	J	J-
10S04E18Q007	1/18/2006	3.5	J	A
10S04E18Q007	5/22/2006	3.6	J	A
10S04E18Q007	**7/17/2006**	**4**		**A**
10S04E18R004	7/21/2005	3.1	J	A
10S04E18R004	10/11/2005	3.5	J	J-
10S04E18R004	1/19/2006	4.1		A
10S04E18R004	5/24/2006	3.9	J	A
10S04E18R004	**7/17/2006**	**3.5**	**J**	**A**
10S04E18R016	8/1/2005	4.1		J-
10S04E18R016	10/11/2005	4.3		J-
10S04E18R016	1/19/2006	5.6		A
10S04E18R016	5/24/2006	5.3		A
10S04E18R016	**7/17/2006**	**4.5**		**A**
10S04E19A002	8/1/2005	4.6		J-
10S04E19A002	10/12/2005	3.9	J	A
10S04E19A002	1/25/2006	3.8	J	A
10S04E19A002	5/25/2006	6		A
10S04E19A002	**7/17/2006**	**5.9**		**A**
10S04E19A004	8/3/2005	2.9	J	J-
10S04E19A004	10/11/2005	4.1		J-
10S04E19A004	1/24/2006	3.6	J	A
10S04E19A004	5/24/2006	2.8	J	A
10S04E19A004	**7/20/2006**	**4.8**		**A**

TABLE 1

Olin/Morgan Hill
Wells Questioned By the Water Board

Analytical Results

Well Name	Sample Date	Result in ug/L	Lab Qualifier	Validation Qualifier
10S04E19A011	8/1/2005	3.8	J	J-
10S04E19A011	10/11/2005	4.6		J-
10S04E19A011	1/24/2006	4.6		A
10S04E19A011	5/24/2006	5.7		A
10S04E19A011	**7/17/2006**	**6**		**A**
10S04E19B008	8/1/2005	2.9	J	A
10S04E19B008	10/11/2005	2.3	J	J-
10S04E19B008	1/19/2006	3.4	J	A
10S04E19B008	5/22/2006	4.4		A
10S04E19B008	**7/17/2006**	**3.9**	**J**	**A**
10S04E19C009	8/1/2005	2.8	J	A
10S04E19C009	10/11/2005	4.4		J-
10S04E19C009	1/19/2006	3.3	J	A
10S04E19C009	5/24/2006	4.1		A
10S04E19C009	**7/17/2006**	**3.1**	**J**	**A**
10S04E19C012	7/20/2005	3.3	J	A
10S04E19C012	10/11/2005	3.3	J	J-
10S04E19C012	1/19/2006	2.6	J	A
10S04E19C012	5/22/2006	3.3	J	A
10S04E19C012	**7/17/2006**	**3.3**	**J**	**A**
10S04E20E002	5/23/2005	6.7		A
10S04E20E002	8/17/2005	5.2		J-
10S04E20E002	10/12/2005	4.6		J-
10S04E20E002	10/12/2005	4.5		J-
10S04E20E002	1/11/2006	5		A
10S04E20E002	5/24/2006	5.1		A
10S04E20E002	**7/17/2006**	**6.3**		**A**
10S04E20E003	8/11/2005	4.9		J-
10S04E20E003	10/12/2005	4.6		J-
10S04E20E003	1/11/2006	2.7	J	A
10S04E20E003	5/24/2006	5.2		A
10S04E20E003	**7/17/2006**	**5.8**		**A**
10S04E20M002	7/19/2005	4.8		J-
10S04E20M002	10/4/2005	4.6		A
10S04E20M002	1/10/2006	5.3		A
10S04E20M002	5/24/2006	5.9		A
10S04E20M002	**7/17/2006**	**6.3**		**A**

TABLE 1

Olin/Morgan Hill
Wells Questioned By the Water Board

Analytical Results

Well Name	Sample Date	Result in ug/L	Lab Qualifier	Validation Qualifier
10S04E29D002	7/19/2005	4.8		J-
10S04E29D002	10/10/2005	5.2		A
10S04E29D002	1/9/2006	5.4		A
10S04E29D002	5/25/2006	5.6		A
10S04E29D002	**7/17/2006**	**4.3**		**A**
10S04E33M006	7/18/2005	5.1		J-
10S04E33M006	10/10/2005	-4		A
10S04E33M006	2/14/2006	5.2		J-
10S04E33M006	5/24/2006	5.9		A
10S04E33M006	**7/19/2006**	**5.3**		**A**
11S04E04C006	7/18/2005	6		J-
11S04E04C006	11/8/2005	4.8		A
11S04E04C006	1/9/2006	4.7		A
11S04E04C006	5/31/2006	5.3		A
11S04E04C006	**7/18/2006**	**3.9**	**J**	**A**
11S04E04C009	7/18/2005	5.4		J-
11S04E04C009	10/10/2005	4.2		A
11S04E04C009	2/7/2006	3.3	J	A
11S04E04C009	5/25/2006	5		A
11S04E04C009	**7/18/2006**	**5**		**A**
Private Well 6	8/17/2005	2.9	J	A
Private Well 6	10/13/2005	3.4	J	A
Private Well 6	1/25/2006	3.5	J	A
Private Well 6	6/1/2006	3	J	A
Private Well 6	**7/18/2006**	**4.3**		**A**

Notes:
Data with matrix spike recoveries less than the recovery limit shown with gray shading
July 2006 data shown in bold